11-1-1929

Osteopathic Digest (November 1, 1929)

Philadelphia College of Osteopathy

Osteopathic Digest

Vol. 3 No. 14 — *Published by the Philadelphia College of Osteopathy Semi-Monthly During the College Year* — Nov. 1, 1929

New College Building Ready November 11

Pittsburgh Physician Speaks to Students

Dr. Harry M. Goehring, of Pittsburgh, Pa., gave an interesting extemporaneous talk to the Senior class on Wednesday at 1 P. M. He spoke of the business end of the office, the personality of the physician. "While the therapy of any school is only one-eighth of any treatment, yet to be successful you must stick to your mode of therapy. 'Doctor, don't you think I ought to have a little medicine,' is often asked. I always answer, 'If medicine had not failed, you would not be in my office.' My school being the last resort, I feel I can handle them as I wish."

"Make 'no medication' your slogan and stick to it. This is especially true for the patient who comes from a medical doctor.

"Always remember that the patient is making an analysis of you just as you are making an analysis of him."

"Treat much and talk little," was another bit of advice of the doctor. "A very successful osteopath that I know only has a treating table and an impediment in his speech."

When interviewed by a Direst representative Dr. Goehring, who treats some very prominent men in this section of the country, decried the fact that osteopaths are the poorest consultants. They are afraid to share responsibility with the men who taught them. A medical man will call in any number of men on a perplexing case. An osteopath seems to be afraid of the procedure.

Chauncey M. Depew was one of Dr. Goehring's patients.

SOUTHERN NEW JERSEY

The first meeting of the season of 1929-30 of the Southern New Jersey Osteopathic Society was held in the Hotel Walt Whitman, Camden, Saturday evening, October 19th. A dinner preceded the business meeting.

In the absence of Dr. True, president, Dr. Durkee presided. Eighteen were present.

Among other business matters transacted the society voted to aid in the effort to obtain the convention of the Eastern Osteopathic Society for 1931 for Atlantic City.

Discussions and actions were in order relative to the amalgamation of the southern branch with the New Jersey Osteopathic Society.

Dr. Wilbur P. Lutz, assistant profesor of physical diagnosis, then delivered an extremely interesting lecture on diagnosis of diseases of the organs of the chest. A brief resume of the lecture is appended.

E. M. Coffee, *Secretary.*

O. W. N. A. MEETS

A meeting of the Osteopathic Women's National Association, member of the National Council of Women, was held at the Home Making Center of the New York State Federation of Women's Clubs. The main topic was "Maternal and Child Welfare."

Dr. F. A. Marshall was chairman and the chief speakers of the meeting were Dr. Evelyn Bush, Dr. Jennie Ryel and Dr. Helen Dunning.

After this interesting meeting tea was served and a musical program was offered.

PHILADELPHIA COUNTY OSTEOPATHIC SOCIETY

The Philadelphia County Osteopathic Society held its regular monthly meeting at the Bellevue-Stratford Hotel, on Thursday evening, October 24th.

Dr. Paul T. Lloyd, chief roentgenologist of the Osteopathic Hospital of Philadelphia, was the main speaker, his subject being "Fractures and Other Common Emergencies a Doctor Meets in His Daily Practice." Dr. Lloyd presented lantern slides of some of the most interesting cases of his experience, together with case histories and diagnoses.

Dr. Frederick Long, chairman of the National Convention Committee, reported progress, saying that funds were being received with regularity and that he has met with the most enthusiastic support. Most of the committees have been named and he looks for a National Convention here in 1930 that will be remembered for years to come.

The November meeting of the P. C. O. S. will be held on November 21st at the Bellevue-Stratford, to be preceded by a dinner at 6.30. One of the most noted osteopathic physicians of the world will be the guest of the society, and she will speak on a subject to be announced later.

A discussion of "The Merits of Electro-Coagulation in the Removal of Diseased Tonsils" will be held at this meeting, in which a number of the leading proponents and opponents will take part, probably headed by Drs. C. Paul Snyder and William Otis Galbreath. A capacity attendance is expected.

ITINERARY OF DR. DUFUR'S TRIP

During the first two weeks of November Dr. J. Ivan Dufur will lecture at the following places. His topic will be "Differential Diagnosis of Nervous and Mental Diseases":

November 4th—Cincinnati, Ohio.
November 5th—Dayton, Ohio.
November 6th—Columbus, Ohio.
November 7th—Akron, Ohio.
November 8th—Cleveland, Ohio.
November 9th—Toledo, Ohio.
November 11th—Detroit, Mich.
November 12th—Michigan (city not scheduled as yet).
November 13th—Michigan (city not scheduled as yet).
November 14th—Michigan (city not scheduled as yet).
November 15th—Grand Rapids, Mich.

TECHNIQUE LECTURES

The Senior and Junior classes will have the opportunity to obtain first-hand information concerning general osteopathic technique. On November 8, 1929, Drs. S. L. Gants and M. T. Mayes will address these two classes on "Technique." Dr. Gants is practicing in Providence, R. I., while Dr. Mayes maintains his practice in Springfield, Mass.

CHEM. MEETING

A meeting of the Department of Chemistry was held on Thursday, November 7, 1929. Detailed plans for occupancy and maintenance of the new chemical laboratory were formulated. A business system of check-up of material used, etc., will be installed.

The National Convention At Philadelphia — July 7-12, 1930

Great progress is being made for your Convention.

All committees are steadily working and reporting marvelous results.

The clinical facilities are unexcelled.

Practical demonstration will be the rule.

The freedom of the hospital and the college is yours.

The Convention News is growing fast.

Watch for it: Next Issue.

Dr. F. A. Long,
Executive Manager.

RHODE ISLAND CLUB

On Wednesday evening, October 23rd, the osteopathic students from Rhode Island gathered at the apartment of William J. Nairn, Forty-eighth and Locust Streets, for a social time and for the purpose of organizing.

The aims of the organization are: Social, to obtain prospective students, to follow the Rhode Island law developments, to keep in touch with activities of the Rhode Island Osteopathic Society, to study the Rhode Island Examinations, to have lectures and demonstrations by Rhode Island field men and to discuss osteopathic topics and literature.

A committee composed of Mrs. Scott, Pekow, Gants, Crowley and Nairn, Chairman, was elected to draw up a constitution and set of by-laws and to formulate a program of activity.

The following students were present at the meeting: Mr. and Mrs. Scott, Mr. and Mrs. Nairn, Messrs. Gants, Pekow, Desotnek, Ogden, Costello, Stevens, Bowers, Crowley, Nordstrom, E. Garland, L. Garland.

All students who plan to practice in Rhode Island upon graduation are invited to join this society as well as those who now claim residence in that State.

MONONGAHELA VALLEY HOLDS FIRST MEETING

The Monongahela Valley Osteopathic Society held the first of their winter's meetings Thursday, September 26th, at Clarksburg, in the offices of Dr. Guy E. Morris, 541-542 Empire Building. Dr. R. E. Goda, of Fairmont, discussed the Newer Methods in the Treatment of Syphilis, and Dr. Preston B. Gandy, of Clarksburg, gave a talk on the Modern Treatment of Varicose Veins.

The next meeting will be held in Weston the last Thursday of October, with Dr. W. E. Montgomery, of that city, acting as chairman of the Program Committee.

The following men have located in our State lately: Dr. Roy W. Eshenaur, 512½ Main Street, Point Pleasant; Dr. Geo. W. Seymour, 260 Jefferson Avenue, Moundsville; Dr. W. J. Whitright, 208 Charleston National Bank Building, Charleston; Dr. John Paul Jones, Buckhannon.

Guy E. Morris, Secretary.

NOTICE

Attention has been called to the fact that a young man is now soliciting subscriptions for medical magazines under the fake pretense of being a student at our Philadelphia College. Members of the profession are cautioned against such imposters. When in doubt, ask for their college registration card.

COLLEGE CALENDAR

Friday, November 1, 1929—Atlas Club Dance. College Orchestra, 4 to 6 P. M.

Tuesday, November 5, 1929—Technicians Meeting, 7 P. M.; College Orchestra, 4 to 6 P. M.

Thursday, November 7, 1929—College Orchestra, 4 to 6 P. M.

Friday, November 8, 1929—Neuron Dance at 8 P. M.

Monday, November 11, 1929—College Orchestra, 4 to 6 P. M.

Tuesday, November 12, 1929—Faculty Meeting, Auditorium, New Building, 8 P. M.

Thursday, November 14, 1929—Student Assembly, 11 A. M.

Faculty to Discuss Problems in New College Auditorium

Tuesday Evening, Nov. 12th

As the poet would say, "We are now about to see the dawn of a new day." The dawn will begin in the form of a general meeting of the faculty and hospital staff of the Philadelphia College of Osteopathy on Tuesday, November 12, 1929, at 8.00 P. M. This meeting will be held in the main auditorium of the new college building at 48th and Spruce Streets. A spirited meeting is predicted.

At the close of the business and program portion of the meeting, a thorough inspection of the college and hospital buildings will be made by the party.

One of the most important items of business will be the announcement of the various details connected with the actual transfer of college and hospital work from our present site to our new location. The Digest will carry information concerning the "moving" in the next issue.

On the program portion of the faculty and staff meeting, Dean Edgar O. Holden will speak on "Administration Problems." In the light of the many new phases of this topic that a new plant of operation will develop, this particular item of the program should be the most important at the present time. Dr. E. G. Drew will speak on the "Post Operative Care of the Patient," followed by a general discussion led by Dr. D. S. B. Pennock, "The Teaching of Osteopathic Technic in the Philadelphia College," will be the theme of a talk by Dr. C. H. Soden. Dr. Rothmeyer will conduct the discussion at this point.

A general report of this meeting will be made in the next issue of the Digest.

DR. E. G. DREW ADDRESSES SURGEONS ON POST OPERATIVE CARE

To the President and Members of the American College of Osteopathic Surgeons:

Gentlemen:

Your program chairman has given me the rather difficult, as well as strenuous, task of preparing a paper on Post Operative Care. Volumes could be written on this topic and yet I remember as a younger surgeon the sparcity of material I have had in my earlier days when a perplexing problem presented itself.

It seems to me that post-operative care can and should be made easier by good pre-operative care and I am rather inclined to think we do not stress as we should the care of the patient before operation. Again post-operative care is largely left to the nurses, some of whom are good and others, well "the less said, the better." Co-operation between the surgeon, the internist and the nurse is the first important step in any successful regime.

Those of you who are in charge of all the work in your particular hospital are quite fortunate in that you can develop a routine and have it working 24 hours a day.

I don't suppose any of us are the product of our own efforts alone, for surgery is so exacting that we must be the sum total of all the schools and teachers we have been privileged to associate with. Therefore, by the very nature of our training we are always looking for new and discarding the old. The post-operative care becomes complex, for some of us use all types of anaesthesia, while others only a few of the many anaesthetic agencies. In a general way we may think of every case of major operation as needing part or all of the following regime:

First—A patient prepared for operation by having the organism functioning as nearly perfect as possible, as, for instance, a tired cardiac muscle can be rested and made to carry through a lengthly operation, whereas it would fail if put to the test without rest. The same might be said of the brain, the kidney, etc. The mental attitude of the patient—in other words, the mental human equation—should be considered.

Second—A well balanced operating room force which will insure speed and highest development of skill. This might apply mostly to the emergencies, but should be a vital factor twenty-four hours of the day.

Third—The after care.

How many of our best efforts are discounted and made nil by poor treatment after the patient leaves the operating room. It is necessary for the surgeon to be on the job just as diligently after, as it was before the operation. Aside from the element of risk danger, the comfort should and must be considered. It is a mistake to have a nurse standing by holding an emesis basin after the patient regains consciousness. The psychic factor here needs no elucidation.

Thei height of the M.D. is not standardized and should be. The fluid will not back up nearly as frequently if the can is just a little above the rectum and the flow not over 10 min. per min., or if the regular Murphy drip apparatus is used. A continuous drip can be given for hours this way, whereas if the can is too high the patient gets very little fluid. Again, a badly depleted patient should have intravenous or hyperdermoclysis at once instead of waiting for the M.D. to make up fluid loss. When much blood is lost, as in Ectopic or post partum hemorrhage, the Scarnell apparatus is a convenient means of transfusing the patient's own blood.

Falling blood pressure following operation can and should be combated by using adrenalin chl. or pituitrin at once. [illegible] whipped into more positive action by energetic osteopathic stimulation by upper dorsal hyper. extention. I think most of us are agreed that aspiration plays a big part in causing post operative pneumonia, again care on the operating table will prevent some; and osteopathic after care by keeping the nerve pathways clear go a long way in preventing others. It is our custom to treat all patients as soon as the operation is ended and keep at it until consciousness returns, then every two hours for the first twenty-four, and our pneumonia rate is very low.

What about the place of Morphia in the after care? It is claimed by some that ward cases which do not receive Morphia Sulphate make a better recovery than private cases which do. I must frankly confess that I see little change in my own cases. It is my practice to give ¼ gr. of M. S. to most cases as soon as they become restless and to repeat an ⅛ the same night if necessary. It is rare for a patient of mine to receive more than the above amount. The so-called gas pains can be controlled by inhibition from the 4-8 dorsal seg. 15 min. on either side of the spine. The extreme hypersensitive pat. will often need a greater relief, but in this case I first use a substitute such as allonal peralga or chloritone. On the second night I like to give Stront. Brom. gas to most patients. It is better to give the Stront. at 5 P. M., instead of waiting until well into the night to do so. However, after all is said and done, to quote one of Philadelphia's great surgeons: "The kindly hand of a well-trained nurse is the best hypodermic in the world."

The question of moving the bowels is also an important one. I have my patients prepared before operation by enemas. So that I do not move the bowels, unless distention is very great, until the second day. In the morning of the second day or sometimes on the evening before, in cases in which there is a little distention, a milk and molasses enema is given—milk 0 1, molasses 0 1. I rarely use any other substitutes for this combination. In cases of distention

(Continued on page 2, column 3)

Central Pennsylvania Society

On Saturday, October 19th, the regular monthly meeting was held at Harrisburg, Pa. The main speaker of the evening was Dr. Kann, who gave an address on "Osteopathy and Medicine." Then Dr. Long outlined the plans for the National Osteopathic Convention to be held in Philadelphia next year. A resolution was adopted, supporting the Philadelphia Committee who have charge during the convention.

College Musicians Organize For Current Season

There has long been need of a musical organization for P. C. O. and at last that need has been recognized. An extensive musical organization to include a clasical orchestra, glee club, and a dance orchestra, has been started within the college. The students are most willing to lend a hand and with the present interest it seems that the school is on the way towards having a reputable organization.

The dance orchestra has had two rehearsals up to the present time and are now busy getting ready for their first dance which will be held shortly. The team is composed of experienced musicians and is led by A. H. Kraus, '33:

Piano—Bill Lumley, '31.
Violin—W. A. Pratt, '33.
Alto Saxophone—Ed Berger, '31.
Tenor Saxophone—Tubby Hilborn, '33.
Trumpet—R. W. Davis, '33.
Banjo—Jim Berry, '32.
Drums—R Nicholl, '33
Flute—Dick Dowling, '30
Vocalist—Wally Kaiser, '32

Frank O. Berg, '31, manager of the orchestra, is busy arranging schedules for regular college dances. He is planning on holding a farewell dance at the old buildings and an opening dance at the new buildings.

It is hoped that with the advent of these musical organizations the social life of the college will be much more interesting than ever before.

Sacro-Iliacs

(Continued from page 2)

of a handicap on the supporting and functioning cells of the injured tissue help them by establishing a normal nerve and blood supply by directing treatment to abnormal tissue.

Patient supine.

(b) Test for posterior fixation.

Combined leverage tension on the posterior fibers of capsular ligament, ilio-femoral ligament and obturator internus and pyriformis muscles by adduction and external rotation of thigh. This causes a separational strain at sacro-iliac articulation and gives greatest range of motion in a downward forward direction. If the articulation is normal leg will lengthen; if not, the length of leg will remain the same.

(c) In case of amputation. Patient on side.

Place one hand below patella, flex or extend thigh, the fingers of other hand extending from posterior spine across on to 2nd spine of sacrum. If in flexing thigh the ilium does not rotate posteriorly, the innominate is fixed anteriorly, whereas in extension of thigh, the ilium does not rotate. Anteriorly the innominate is fixed posteriorly.

Measuring

Where deformities are present in lower extremith the distance from

Leg and thigh flexed.

Interlaced fingers placed below patella, thigh then flexed to right angles with trunk and knee placed in operators axella to enable the operator to exert greater tension on the muscles to which the stress is to be applied. Then the movements of flexion, extension, internal and external rotation, adduction and abduction are carried out separately and then following by circumduction at hip joint.

Examine carefully the gluteal region for contracted or relaxed fibers of gluteous maximus and gluteous medius. Invariably in sacro iliac lesions these muscles are involved and should be normalized as follows:

(a) Manipulation at right angles to fiber when contracted.

(b) A rotary manipulation when relaxed.

Anaesthesia used in correction of some acute and chronic lesions. Keep in place by adhesive cast for one week.

C. HADDON SODEN, D.O.,
Head of Technique Dept.

Surgery

1. Give the symptoms of ischiorectal abscess.
2. Discuss the use of surgery in traumatic arterial hemotamata.
3. Give the symptoms of empyema and outline treatment.
4. Discuss general treatment in severe burns. Discuss local dressings.
5. Give the surgical treatment of carbuncles. Why should a guarded prognosis be given in carbuncle of the upper lip.
6. Discuss treatment in sprains of the ankle.

Standardization of Method

(Continued from last issue)

7. Right side bending.
   a. Operator and patient assume position as described above.
   b. Upon palpation of the transverse processes of the atlas the right transverse process will be found at a higher level in the angle formed between the ramus and the mandible and the mastoid process of the temporal bone than is normal, and the left transverse process will be found at a lower level in the angle between the ramus and the mandible and the mastoid process of the temporal bone than is normal.
   c. This position persists when an attempt is made to put the occiput through its normal range of motion with relation to the atlas.
8. Left side bending.
   a. The position of the transverse process of the atlas will be found to be reversed from findings in right side bending.
9. Impacted lesion.
   a. Operator and patient assume position as above described.
   b. The transverse processes of the atlas are found midway between the ramus and the mandible and the mastoid process of the temporal bone and on the same level.
   c. This position will be maintained when an attempt is made to put the articulation through its normal range of motion.

Corrective Technique.

Bearing in mind that an osseous osteopathic lesion is a partial or complete immobilization of an articulation within its normal range of motion and that our technique is to be applied in such a manner as to develop a separating stress between the articular surfaces with forces directed at right angles to the plane of the articular facets. The following examples are given:

1. Patient supine, operator stands on the lesioned side. Supposing the left side to be in lesion, the operator grasp the chin of the patient with the right hand, supporting the head with the right forearm, and turns the head away from the lesioned side until rotation of the atlas upon the axis reaches its physiological limit. The thenar eminence of the left hand is placed under the occipital bone about two inches posterior to the tip of the mastoid process of the temporal bone. A thrust is made with the left hand in such a direction that if the line of force were projected through the head, that it would emerge at the right eye; coincidently, the right hand develops an upward traction on the chin sufficient to overcome the thrust with the left hand. These two forces create a resultant force which produces a separating stress between the left condyle of the occiput and the left superior facet of the atlas at right angles to their curved surfaces.
2. Patient supine, operator standing at patient's head. Patient is grasped beneath the chin with one hand and beneath the occiput with the other, and the patient is then requested to grasp the sides of the table. The operator lifts the patient's head slightly from the table and exerts traction in a line with the long axis of the body of the patient. This tends to produce relaxation in the musculature surrounding the articulation and produces separating stress at right angles to the planes of the articular surfaces. Still maintaining traction, put the occiput through its normal range of motion.
3. Patient supine, operator standing at head of patient. For correction of a left unilateral occipital lesion, the operator's right hand is placed on the patient's head, fingers extending down the back of the neck and the thenar eminence against the patient's right mastoid process, the dorsum of the operator's hand being against the table, thus causing the immobilized articulation to be the upper of the two articulations. Operator places left hand on the patient's left temporal lesion, fingers extending down over the left ear. Now the operator exerts the separating stress at the right angles to the plane of the joint surfaces by bringing to bear a downward pressure with the left hand, while at the same time the right hand is permitted to act as a fulcrum in the attempt to produce motion in the immobilized articulation.

Comments.

It will be noted that the technique as described above may be used for the correction of any or all types of occipital lesion. This we realize is not in accord with the technique which has formerly been advanced for the correction of various occipital lesions. We believe that the planes of the articular facets of this joint do not alter their position with the relation to each other in any of the above lesions. The condyles of the occiput are directed downward, a little forward and a little outward, and they fit into the deep facets of the lateral masses of the atlas. The motion which occurs in this articulation does not result in a forward, backward or sidewise sliding of the occiput on the atlas. Given points on the superior articular facets of the atlas are always in contact, with some portion of the articular surfaces of the condyles of the occiput. Therefore, as the condyles of the occiput are fixed to the occiput, the line of force developed at right angles to the plane of the articular facets in any given occipital lesion must also be the correct line of force to be applied for the correction of any other given type of occipital lesion.

GEO. S. ROTHMEYER, D.O.,
Secretary,
Osteopathic Technicians, P.C.O.

Carcinoma of the Colon and its Diagnosis

By Dr. Paul T. Lloyd

The presentation of this paper, "Carcinoma of the Colon and Its Diagnosis," is a subject worthy of more consideration and time than can be given here. The scope of this paper then, must be a limited one, and only outstanding facts put in writing.

The writer lays no claim to originality of the scientific data contained in the subject matter, these having been obtained from authentic reports and contributions.

Etiology—The etiology of carcinoma of the colon is as vague as is carcinoma in general. However, iritation undoubtedly plays a large part in the causation of this tumor—irritation due to mechanical, chemical or hereditary causes. Trophic disturbances affecting the individual cell or groups of cells may be a patent factor, though research along this particular channel is necessary before definite theories may be expressed. Irritation then seems to form the basis for our present ideas regarding the etiology of carcinoma of the colon, since the most common sites of occurrence are at points of normal constriction or of physiologic stasis, thus the irritating intestinal contents are allowed to produce tissue change. MacGlannon points out that the morphology of carcinomata of the colon tends to indicate that papillomatous and adenomatous growths, both essentially benign, may undergo transition and become carcinomatous.

Age—Carcinoma of the colon most often occurs in patients over the forty year period. However, there are many cases on record where young adults have been affected, and authentic records show that children as young as fifteen years have been victims to this disease. Our records give thirty-three as being the age of the youngest patient seen to possess colonic cancer, with the greatest number of cases ranging from forty to sixty years of age.

Pathology—Primary carcinoma of the colon is prone to occur as a single lesion, though it may be multiple. The sigmoid and descending colon, so far as our records show, are the most common sites for tumor growth, though authorities give the sigmoid and cecal regions as being most common with the hepatic and splenic flexures, transverse, descending and ascending colon affected in the order named. As a rule the tumor takes on a slow rate of growth, and metastases occur usually only after the tumor has progressed in development to a point where the patient realizes that something is radically wrong and very definite warnings of grave abdominal pathology are present. The tumor involves the bowel, either as a tubular or annular infiltrating process, or as a nodular mass, and in some cases a combination of these two forms is found.

Within the tumor proper, cellular activity becomes very great with the malignant cell invasion occurring by expansion or infiltration. If expansion be the basis for invasion, then the epithelial cells form a compact mass which is definitely circumscribed by a fibrous connective margin due to reaction on the part of the invaded connective tissue. Extending from this margin into the central mass are fibrous trabeculae, which form a more or less dense stroma. Jacobson states that adeno-carcinoma is the most common type of tumor and he describes it as follows: "Adeno-carcinoma in the colon grows slowly and tends to circumscribe the coats of the intestine, filling, as it were, the lumen of the bowel, creating, as progressive growth takes place, obstruction. Adeno-carcinoma is essentially a 'soft' tumor. The blood supply in the tumor is of well-formed blood-vessels, so that little hemorrhage occurs within the growth itself, therefore, hemorrhage occurring during progress of the disease, is the result of surface breaking down of the growth, in the lumen of the bowel. Tendency to ulceration is the rule."

While the globular mass tends to encroach on the bowel, the epithelial cells extend to, and permeate the coats of the bowel until the serous layer is reached. At this time adhesions begin to form, due to the connective tissue reaction. Metastases at this period becomes a complicating factor, for the tumor cells enter the mesenteric lymphatics and spread to involve the adjacent glands and distant organs.

Extension through interglandular routes by infiltration, is the common mode of growth. This is accomplished by way of the lymphatics. The lymphatic vessels of the large bowel are to be placed in four main groups, namely, those of the mucous, submucous, muscular and subserous coats. Those of the mucosa join with the subglandular lymphatics, located on the medial side of the muscularis mucosae. The subglandular vessels become united to those of the submucosa and finally go to join the muscular and sub-peritoneal groups. Jacobson believes that involvement of the post peritoneal glands accounts in a great measure for the anemia present in carcinoma of the bowel, since they have a definite hemipoietic function. The infiltrating cancer cells may then grow either horizontally along the periglandular and subglandular lymphatics, or perpendicularly, to reach the submucous groups. If the latter path is followed, an annular mass is the result. When the subperitoneal lymphatics become invaded, adhesions, as stated previously, are formed in the vicinity of the growth.

Symptomatology—The symptoms present in early carcinoma of the colon may be such as to arouse no particular anxiety as far as the patient is concerned, but careful questioning on the part of the physician will generally produce evidences of a perverted abdominal state and should arouse his suspicions concerning the possibility of a malignancy being present.

A person of middle age, with a complaint of bowel disorder, when previously there had been no signs or symptoms of abdominal distress or gastro-intestinal disease, should put the examiner on his guard. The complaint, as presented by the patient, may be and usually is one of bowel disturbance, accompanied by constipation or diarrhea, or both. Pain is quite liable to be present and varies from a crampy sensation to severe colic and soreness. The symptom picture presented will in a large measure depend upon the site and location of the tumor. Carcinoma developing in the left half of the colon tends, as a rule, to be obstructive in character, while if the lesion be in the cecum or right half of the colon, symptoms of irritation will likely be present, namely, nausea, vomiting, diarrhea and central abdominal pain. In cecal carcinoma symptoms of acute or sub-acute appendiceal disease may be present, but rigidity of the abdominal musculature will not be found and palpation will not reveal the marked tenderness over the lower right quadrant, as is present in acute pathologic states affecting the appendix.

As the tumor progresses in growth, a palpable mass may be felt. Ulceration of the tumor with a resulting melena or signs of obstruction in the bowel may compose the clinical picture. While all of these signs tend to confirm our suspicion regarding the presence of malignancy, they are as well signs of advanced pathology, and make the prognosis most unfavorable.

Diagnosis—The diagnosis of carcinoma of the bowel, aside from the aforementioned clinical signs and symptoms, rests with laboratory and roentgen ray findings. The laboratory examination should consist chiefly of examination of the stool and blood. Stool examination, as a rule, shows blood present either microscopic, macroscopic or in frank and visible quantities. In cancers of the cecum and proximal colon occult blood will most often be found. If the malignancy involves the left half of the colon then blood will be mixed with the stool or coat the outside of a well formed stool, while cancer of the sigmoid and lower bowel may result in visible blood being passed at stooling. Mucous in abundant quantities, generally of a clear, glairy or blood-streaked type, is a constant find in colonic cancer. Pus is also a common finding at microscopic examination of the stool, but since it is also present in numerous other pathologic states of the colon, it has little significance, so far as diagnosis is concerned.

A blood count will reveal a secondary anemia, due chiefly to loss of blood and to toxic absorption. Late in the disease the anemia may, and generally does, assume profound proportions.

Roentgen ray examination of the colon proves to be the most reliable agent, so far as establishing the diagnosis of colonic pathology is concerned. Keeping in mind the pathology of carcinoma of the colon, we can easily understand why this is so. However, diagnosis of the disease by roentgen examination alone should not be the rule. Malignancy and its diagnosis calls forth the best that is in us, we must not be hesitant in proceeding to rule out or establish a diagnosis of cancer, and this is best accomplished by a combination of clinical examination, laboratory aid and study of the colon by the roentgen ray. If we do this, we will, as Russell Carman has so aptly stated, "form a network through which few cancers escape."

The chief roentgen signs of carcinoma in the colon are (1) the filling defect, (2) obstruction, (3) palpation of a tumor mass at the site of the filling defect, (4) altered motility, mobility and position of the colon, (5) point tenderness elicited at screen examination over the site of lesion. All of these signs are suggestive of intrinsic pathology and form a valuable foundation upon which to base our conclusions. The filling defect produced by cancer is a localized irregularity in the contour of the bowel and manifests itself as spasm, contracture of the bowel wall, or deformity due to the protrusion of the growth into the lumen of the colon. The filling defect is as a rule irregular and ragged, though it may appear only as a spastic contracture, or as a smooth annular defect. This defect is a constant finding at all examinations. It is not altered by the palpating hand, and does not disappear under the influence of an anti-spasmodic. The growth, by its presence, may produce obstruction, therefore an alteration in the motility of the colon due to the involved bowel structures produces a delay in the motor meal, this delay being proximal to the site of lesion. Hurst calls attention to the fact that non-malignant stricture of the colon is an exceedingly rare occurrence. At screen examination, a palpable mass may be felt corresponding to the site of the filling defect. Altered position of the colon due to formation of adhesions, and extensive colonic involment with a consequent loss in range of mobility and point tenderness elicited at the site of lesion, may be determined at time of screen examination.

Our procedure in determining the presence of bowel pathology is the use of both the motor meal and the barium enema. The enema study alone will, in a great majority of cases, disclose the site of lesion and the character of defect present, by virtue of the fact that the colonic lumen is completely filled by the barium water, bringing about maximum distention of the bowel. An excellent mode of procedure is to place the patient under the fluoroscope during the administration of the enema, enabling the observer to note the manner in which the bowel is filled, making possible the location of obstructive lesions.

The motor meal lends information relative to the motility of the bowel, points of stasis, if any, and the degree of stasis present, that is in the number of hours or length of time that a given portion of the tract retains the opague media. Film studies are of course, necessary, not only as a matter of record, but become of value in the study of the type of lesion present and its extent.

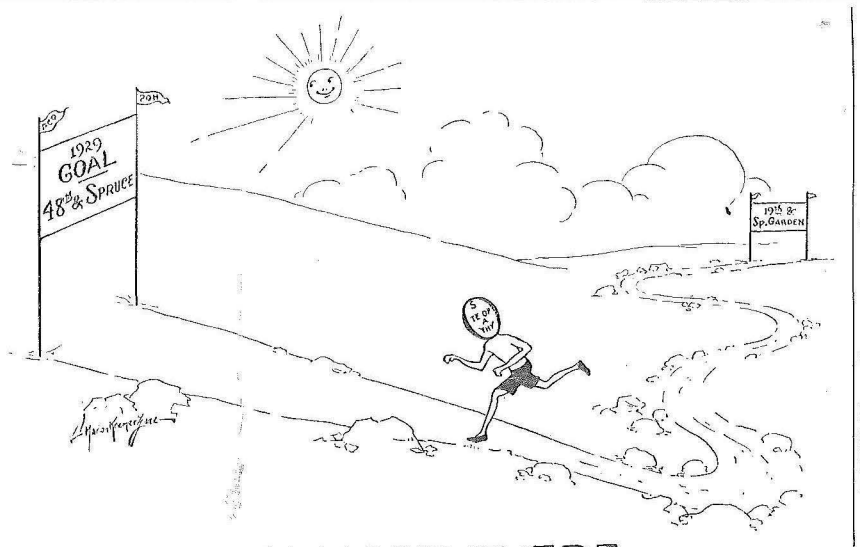
When an intrinsic lesion is evident from the findings obtained by roentgen study, an antispasmodic is administered. This procedure is of value since spasm due to reflex from some remote pathology may cause a defect in the contour of the bowel. The antispasmodic will not affect or change the defect produced by carcinoma or intrinsic pathology, but will remove and alter spasm of reflex type.

Once a defect has been found to be due to intrinsic pathology and it has assumed a character of permanency, a great deal has been accomplished as regards ultimate diagnosis. The lesion has been located, its characteristics studied and information regarding the extent of bowel structure involved computed. So far as the latter statement is concerned, namely, extent of involvement, the roentgen examination may not exactly be depended upon, for only the surgeon and pathologist are able by exploration, biopsy and microscopy to determine this fact correctly.

It becomes the physician's duty then to seek surgical advice, once a roentgen report of intrinsic filling defect or lesion is reported. Immediate surgical intervention, and certainly not procrastination, makes for success in a given case of suspected or proven carcinoma of the colon.

Differential Diagnosis—There are two chief diseases which will produce roentgen signs and a filling defect as found in carcinoma, and which must be ruled out before diagnosis of carcinoma can be made. These diseases are: Hyperplastic tuberculosis and diverticulitis. Hyperplastic tuberculosis will furnish a filling defect not unlike that of carcinoma, but can be ruled out by the history and clinical and laboratory findings. Generally tuberculosis of the colon is secondary to infection in some other part of the body, the pulmonary structures being most often affected. Finding of the initial tuberculosis lesion, of course, tends to confirm the findings present in the colon, at least account for them in a large measure. Cecal tuberculosis produces roentgen signs, chief of which is the filling defect with a gap or unfilled area noticed. This gap or non-filling being due to infiltration of the colonic structure. There is produced by the infectious process, a marked rigidity of the bowel wall, which, in turn, causes a loss of physiologic function, and the barium passes through without hindrance.

Diverticulitis gives a definite colonic filling defect. However, there is no blood present at stooling, nor is there on examination of the abdomen, marked tenderness elicited over the site of lesion. Diverticulitis most often gives a fairly definite roentgen picture, characterized by multiple extra-luminal shadows which contain a residue of barium after the remainder of the colon is evacuated. Attention should be brought to bear upon the fact that a carcinoma may be superimposed on either of the above-mentioned conditions.



ALMOST THERE

(Continued from page 2)

Third. The data collected in many experiments are an end in themselves. There is no further use for them, and hence they have no significance for the student. Such "busy work" serves no worthy purpose.

Too frequently the laboratory and classroom, sometimes improperly called the lecture room, are separate not only physically but intellectually.

The laboratory should be a place where the learner puts questions to nature, observes accurately and deduces conclusions logically, not a place where directions are followed blindly and meaningless results obtained. The value of individual laboratory work has been seriously injured by requiring each student to do exactly the same experiment as every other student, and do it in as nearly the same time and same way as possible. The spirit of the project method should vitalize the experimental work. There will always be some students who should modify the work to meet their special needs or interests. Such differentiation should be encouraged and lists of alternative work should be available to utilize individual interests and inclinations.

Finally, in summing up, a few comments may be made on existing conditions.

Improvement of laboratory practice will result in less cumbersome forms of note taking and of notebook making. The experiment is not designed for the sake of a notebook record. A summary of results which can be used in interpreting the work done should be made, but students should be allowed much freedom in the precise manner in which the record is made. They should record important and significant facts and the record should be clear and complete. That is, the laboratory is a "workplace," and records should be simple and direct accounts of the real and vital work that has been done.

Laboratory work should be planned so carefully that time is not wasted in detailed "microscopic work," in experiments which cannot be understood, and in elaborate drawings to keep the section occupied until the end of the period. Information should be freely and interestingly given by the instructors to stimulate the student to seek more knowledge at first hand. Laboratory work should usually precede text-book assignments or library references, but should follow when very difficult experiments are to be undertaken.

Recapitulating we have:

A. Laboratory methods, when rightly used, make for skill in observation and experiment. All are agreed that personal contact with facts is a great advantage. The constant absorption of statements and opinions from text-books makes a student lean so much on authority that he ultimately becomes unfitted for independent observation. Habits of self-reliance, resource, and initiative can be acquired in good laboratory methods or by direct contact with facts themselves.

B. Laboratory methods assist in developing the ability to reason and think in a logical systematic way. A student must learn to reflect on the available data bearing on the problem in hand; and to explain a phenomenon by drawing legitimate inferences from approved evidence. It seems a mistake to postpone the exercise and discipline of the thinking faculties until a student has memorized a vast accumulation of facts. It is necessary to form habits of reflection and thought as early as possible. Exercise means growth. It is far easier to acquire a mass of facts than to learn to draw a sound inference as to what the facts prove. The thinking and reasoning faculty can be developed only through the students' own individual efforts. Every exercise of the reason, said Sir Humphrey Day in 1811, strengthens the habit of correct thinking, and adds sometimes to the influence and power of common sense. Vague indefinite observing is usually followed by muddled thinking. Clear thinking pre-supposes clear seeing.

C. When it comes to memory and knowledge of relevant facts, laboratory methods are efficient. Facts, of course, form the raw material of any subject. All definitions are based on facts, are facts themselves. It has been found that a student is better able to memorize facts when the stimulation of the facts comes not only through the ear and eye, as in reading, but through as many senses as possible, as is the case with laboratory exercises.

D. Laboratory methods tend toward the development of a critical and impartial judgment. The imagination, though very useful, is a most dangerous ally; and a stays line of demarcation must be observed between valid or legitimate deductions from the evidence, and what has been supplied by the imagination. Each proposition must be judged solely on its merits. There must be no shirking of the facts, no exaggeration. The mind must be kept open and free from prejudice.

R. C. Erb.

OSTEOPATHIC DIGEST
The Official Bulletin of the Philadelphia College of Osteopathy
19th and Spring Garden Sts., Philadelphia, Pa.
Advertising Rates on Application.
Subscription Price, $1.00 per year.

Vol. 3 NOVEMBER, 1929 No. 14

THE LABORATORY METHOD

Today there are many methods used in teaching. New methods are being invented all the time. Experiment schools are erected where these methods are tried out, much the same as new serums, new vaccines are tried on innocent guinea pigs. And every new method has some advantage over the other fifty-seven varieties. And so it goes.

We will deal with the so-called laboratory method of instruction. The aim is not to underrate the teaching of subjects that are not laboratory subjects, but to advance reasons why laboratory methods of imparting knowledge may be advantageous, even in the now purely book type of didacticism.

In ancient times, the majority of "educated" people believed it to be undignified for a self-respecting man to make experiments. They did not consider knowledge obtained by observing nature worthy of mental occupation. The leading philosophers would devote themselves to fantastic theories about material things. Their minds became so warped that facts were either dismissed or else explained by extravagant ideas lacking truth and reality.

Slowly educators came to see the value of basing their theories on observed facts, even allowing their students to learn directly from nature—the so-called nature study. Martin Luther's attitude to nature is full of interest. He was brought up in schools in which, nature was studied, not by observing the earth, air and skies, but by perusing the works of Aristotle and Pliny. It was the reign of words, not of things. "We are on the dawn of a new era" he said, "for we are beginning to recover the knowledge of the external world that we had lost through the fall of Adam. We now observe creatures properly, and not as formerly. By the grace of God we already recognize in the most delicate flower the wonders of divine goodness and omnipotence. See that force display itself in the stone of a peach. It is very hard, and the germ it encloses is very tender, but when the moment has come the stone must open to let out the young plant that God calls into life. Erasmus passes by all that, takes no account of it, and looks upon a new [illegible] jects as cows look upon a new gate." This was Luther's way of expressing the beginning of laboratory methods in the 16th century.

John Locke, of the 17th century, was also an advocate of "nature study." He condemned the practice then in vogue of requiring verses and essays on abstract subjects. "The learning of Latin," he says, "being nothing but the learning of words, a very unpleasant business both to young and to old, join as much other knowledge with it as you can, beginning still with that which lies most obvious to the senses—such as is the knowledge of minerals, plants and animals, and particularly timber and fruit trees, their parts and ways of propagation, wherein a great deal may be taught a child."

Today we know that true knowledge about material things can be obtained only through the senses. Experience is the mother of true knowledge. Not many years ago, an apt quotation from one of the classical writers, say Aristotle, was considered ample proof of the truth of any statement. Today we care little for mere opinions. We focus our attention on facts obtained through laboratory methods. It is not always easy to utilize facts without distortion or bias. Things are not always what they seem. It is often difficult to distinguish appearances from realities. The sun appears to rise and set. As Robert Hooke would have said: it is necessary to be on guard against deep-rooted errors which may have been grafted science by the slipperiness of memory, the narrowness of the senses, and the rashness of the understanding. No reliance can be placed on vague impressions. Evidence must be clear and precise.

If one studies the various modern public school plans, it will be found that laboratories are usually included. The laboratories, in many cases works of art, show that the necessity for having them has been recognized, at least by the architects. Nevertheless the statement made by the Committee of Nine, although startling to those who have looked only into one or two of the best schools, is, it may be feared, not without justification. They say: "While the laboratory method is almost universally approved by the science teachers, the text book method prevails in the schools, to such an extent that laboratory work is incidental, inefficient, and in many cases excluded altogether."

Let us consider some of the special values of the laboratory method of instruction. Dr. Alexander Smith, of Columbia, names one value of laboratory work under the caption "For Teaching Knowledge-Making by the Study of Natural Objects and Phenomena." Since this arrangement of words is better than ours we will use it as the first value of laboratory work.

Dr. Smith states further: "The knowledge by which we live is not furnished with an index, nor is it arranged alphabetically. It is thrown at us much like the experience of a professional man, and, as a school of education and a sphere of activity, the world is more like a laboratory than a library. The experience in science quickly shows the fallacies into which we commonly fall and from which experiment and renewed observation alone can rescue us."

Professor Remsen, in an address at the opening of the Kent Chemical Laboratory of the University of Chicago said, "By a scientific mind is meant one jectively, to judge things on their merits, and that does not tend to prejudge every question by the aid of ideas formed independently of the things themselves."

A second value of laboratory work is that it teaches knowledge-making by using the principles of observation and induction. Observation is more complex and difficult than we sometimes realize. It implies more than as one writer describes as "ocular accuracy." The process is one of the mind, although the phrase suggests that the eye as a physical instrument is mainly concerned. In many experiments in laboratory instruction, the use of experience and reasoning in observation so greatly predominates that the part which the eye or the other senses play becomes relatively inconspicuous. Laboratory methods of instruction prove that observation, while necessary, must be coupled up with a fine sense of discrimination between the worth and the unworth before proper induction can take place. Observation of a general character is also of little value, but when observation as a faculty of the mind is linked with some definite subject matter it becomes a powerful asset. Galton has shown that sailors' eyes, instead of being more efficient physically than other peoples, are really less sensitive than the average. It is the ability of the seaman to interpret what he sees in the light of experience that makes him a better observer of some things. A boy may see ten times as much as a man, yet the man may learn ten times more. We see then that training in observation consists really in storing the mind with suitable experiences, all thoroughly classified and digested.

A current writer on the laboratory method gives the third general value of this method of imparting knowledge; that of teaching caution and mental rectitude. A student must be taught to be cautious in forming conclusion. It is desirable to have students with an open mind toward external conditions and not too ready to arrive at definite conclusions, but rather to weight all facts and circumstances carefully with the thought. This is especially true in teaching any science which is abundant in theories and group notions. Such studies impress one with the necessity for distrusting preconceived notions or furnish a better preparation for tenaciously employing this principle as one of the best guides in all the actions of life. The line of demarcation between the minimum inference which the facts actually justify, and the more extensive one which we are continually tempted to draw, is often so easily passed that the most varied experience in searching for it and remaining on the safe side can never make the process too familiar.

The practice of careful scrutiny of theories, hypothesis and even laws and their "continual probation before the court of experiment" gives rise to an excellent habit of mind which finally finds delight in the search for exact knowledge and correct opinions and views for their own sake. Laboratory work fosters mental rectitude.

Fourth. Laboratory methods of instruction furnish first and not second-hand knowledge, if rightly carried out. The efficient study of any body of knowledge must be carried out by direct encounter with the material of the subject itself. Our best historians are the ones who have delved into history, looked up old documents, and not merely read a history book. The study of what some one else has said or thought about a subject is an interesting, but entirely different exercise. We were not taught Latin by being given an English translation of Caesar's Gallic Wars. Every one understands that the study of Latin means the study of the text itself, "When in Rome do as the Romans do." That expresses the direct method of teaching. It is the laboratory method of teaching.

Fifth. Laboratory methods of teaching tend to hold interest and attention. Unless experiments are exceptionally tedious, it is almost impossible for the interest of the student to be withdrawn or for his attention to flag. Legitimate curiosity is usually aroused in laboratory work, and with this free and immediate attention is secured. The rest is comparatively easy.

Professor Dewey has pointed out another advantage which the laboratory possesses over the book, inasmuch as the performance of an experiment entirely diverts the attention of the student from the thought that he is studying and fixes it completely on that which is being studied.

Sixth. Clearer expressions are obtainable in this method. In most studies we begin with the expression of the fact, and seek by study of the statement to reach the fact itself. This method may sound extremely well to mature minds as those of teachers who have forgotten their days as students. In practical studies, or those where there is some form of laboratory instruction, either as real experiments, demonstrations, projects, excursions, etc., we encounter the fact first, and, having the fact clearly in mind, proceed to find a suitable expression for it. The former process is subject to misunderstandings, not by the teacher so much but by the student. Even if the language and grammar used is fortunately chosen, "one person equation," as one writer puts it, "resulting from the associations we have formed with the words, may result in more or less distortion when we seek to grasp the meaning."

A Columbia University professor in science, gives this interesting account on the subject: "We are all familiar with the game of 'rumor' in which the final results bear scarcely any resemblance to the original. Much instruction is of this kind. The teacher takes the fact he intends to present from a statement in a book. It went through several stages even before it reached the teacher's eye. But, leaving this out of account, we have first the teacher's conception of its meaning, then the expression which the teacher gives it in conveying this conception to the class, then the interpretation they put upon the teacher's statement, and finally the effort they in turn make to reproduce in their own language and with less mature minds." In the laboratory the learner encounters the fact directly.

Finally, laboratory work furnishes excellent manual training if properly carried out. It is, therefore, undoubtedly of value in that cultivation of the mind which is expressed by care and neatness in mechanical matters.

The fact that laboratory work in general has not accomplished the results expected indicates that the present method and content of laboratory work need reorganization. This fact was brought out by a commission on the reorganization of secondary education as appointed by the National Education Association. A few common causes of disappointment in laboratory procedures were given by this committee after they had their investigation by actual observation and the questionnaire method. While laboratory methods have and probably are still failing, it is also true of many of the didactic methods that have been in use for a longer period of time.

One cause given for the failure in laboratory procedure is that experiments are too frequently devised to check up and prove generalizations or laws, the truth of which the student already perceives.

Second. Experiments often repeat work described in the text in such a way that the outcome is uninteresting and of little value.

POST-OPERATIVE CARE

(Continued from page 1)

I precede this by giving hypo 1 cc. obstetrical pituitrin one-half hour before the enema. The nurse must report the passing of flatus (always a welcome sign, I think you will all agree.) If this does not occur, the same procedure is carried out in 2-4 hours, or again the same evening or following morning.

When vomiting occurs frequently or persistently, gastric lavage should be used early and not late. Cases which vomit after the first twenty-four hours in which the peritoneum is not markedly inflammed, a twelve or twenty-four hour water fast will usually stop the vomiting. When the peritoneum is at fault only repeated lavage will be of use plus the water fast.

In cases of prolonged anaes. or those tending toward acidosis, milk mag. drahm every four hours is a good routine. In those cases in which the stomach is upset, from 100 to 500 cc. of a 5 per cent Sodium Bicar. intravenous will be of inestimable value. The early use of fruit juices is also a great help. Osteopathic inhibition in the region of the first rib will help many cases. Cervical traction has also been of use.

Diet—For the first twenty-four hours should be liquid, then semi-solid, especially junket, gelatine, custard, etc. On the fourth or fifth day most patients should be eating soft food and shortly after this general diet.

Getting up—It is impossible to enforce a hard and fast rule as to the time of getting up. A MacBurney appendectomy can sit up on the third day and may go home on the fifth or sixth day. On the other hand a large incision takes a much longer time to heal. Instead of putting the patient into the chair from the bed I am using the old method of allowing him to sit on the edge for a while on part of one or more days, and then when he goes into the chair he is not so apt to faint.

Last year we celebrated the one hundredth anniversary of the birth of Andrew Taylor Still. As an osteopathic school of practice we are obligated to his memory to make the best possible use of the therapy he gave us. Pre-osteopathic care of the pre-operative patient is an adequate answer to that challenge. As for myself, some day I am going to have tattoed on my abdomen these words: "If this old thing needs to be opened, take me to an Osteopathic Hospital." That is my own confidence in the therapy of Dr. Still for both pre-operative as well as post-operative care.

BOOK REVIEW

MINOR SURGERY—By FREDERICK CHRISTOPHER, M.D., *Associate in Surgery*, Northwestern University Medical School. W. B. Saunders Co., 1929.

Although there are many excellent texts on minor surgery, there are few, very few which are written from the standpoint of the physician in general practice and who is located away from the facilities of a well-equipped hospital. This text is written not as a compilation of other books, but from the extensive surgical experience of a man who appreciates the many minor surgical emergencies which daily confront the general practitioner.

For this reason, Christopher should at once appeal to the osteopathic physician conducting a general acute practice, especially those located in smaller communities more or less remote from friendly surgical facilities.

Practically every minor surgical topic is covered in the text. Fractures are especially well covered in every detail; etiology, methods of diagnosis, manual of reduction and various types of splints suitable for each case. Then, too, post-fracture treatment is well covered, including the use of physiotherapeutic appliances, Diathermy, Radiant heat, massage, etc., with detailed directions for the use of each. The most recent advances in fracture work, notably that of the reduction of fractures under local anaesthesia is taken up. Dislocations are very fully discussed and follow-up treatments described in sufficient detail.

Infections of the fingers and hand, so often a source of worry to the physician is approached from every angle and all phases of treatment, palliative, conservative and radical methods are outlined in detail. When incision and drainage is recommended, the author not only tells when to open, but points out the surgical landmarks to follow and important structures to be avoided.

Under the section devoted to varicose veins and ulcers, the book devotes considerable space to the treatment by the injection method, which is especially interesting in view of the prominence which this work has received at conventions and post-graduate clinics in the past several years.

In the chapter devoted to minor surgical technique, procedures such as vaccination, applications of plaster casts, bandaging, hypodermoclysis, infusion, etc., which the physician is often called upon to perform are taken up clearly and concisely.

Anaesthesia—both local and general. Indications, and contra-indications, dosage, etc.—is covered briefly and to the point.

The text should, by all means, be a part of the working library of the wide-awake osteopathic physician who is conducting an acute practice.

GEORGE L. LEWIS, *D.O.*

SACRO-ILIACS

The method of depending on bony landmarks such as relationship of posterior superior spine to 2nd spine of sacrum separation of symphysis pubis, variation in length of leg compensatory lumbo-sacral lesions and spinal curvatures is reliable where the articulations are normal, and there are no bony abnormalties or change in muscle tension.

Do not overlook the important muscles attached to pelvis which range from 21st dorsal to fibula and tibia. Any change in these muscles can produce a change at articulation which is more often a false twisted pelvis.

Psoas Magnus and Parvus—Flexors, either unilateral or bilateral, if the lumbar region is fixed.

Pyoiformis—Extensor either bilateral or unilateral.

Coccygeus—Extensor of sacrum.

Gluteus Maximum—Extensor either unilateral or bilateral.

Perineal group must act together and if contractured will extend sacrum, relaxed will cause extension of Iliac.

If there are changes due to Rickets, Exostosis or bone pathology such as Tuberculosis, Arthritis, Osteomalacia, Osteittes, Deformans, Fractures, Sacrolized 5th lumbars, or secondary malignancies as Osteo-sacroma or Osteo-carcinoma more careful tests have to be made such as:

1. Motion.
2. X-Ray.
3. Measurements.

(a) Test for anterior fixation. Patient supine.

Combined leverage tension on the capsular ligament and lateral rotators by extreme abduction and internal rotation of thigh. This causes a separational strain at sacro-iliac articulation and gives greatest range of motion in and upward backward direction. If the articulation is normal leg will shorten, if not, the length of the leg will remain the same.

X-Ray should be employed where any of the bony pathological changes as above mentioned are suspected.

Corrective Technique

1. Patient on right side, right arm under and back of patient. This produces a physiological locking of vertebral column. Legs and thighs flexed. Right hand exerts forward pressure on posterior superior spine if desiring to correct posterior innominate lesion and fixes Sacrum if correcting an anterior innominate lesion. Left hand below patella, flexion of thigh on abdomen, external rotation and extension of thigh.

2. Unilateral or bilateral anterior innominate:

Patient face down. Pillow under thighs. Patient's elbows on table on a line dropped perpendicularly from shoulder. A downward springing pressure is made on base of sacrum.

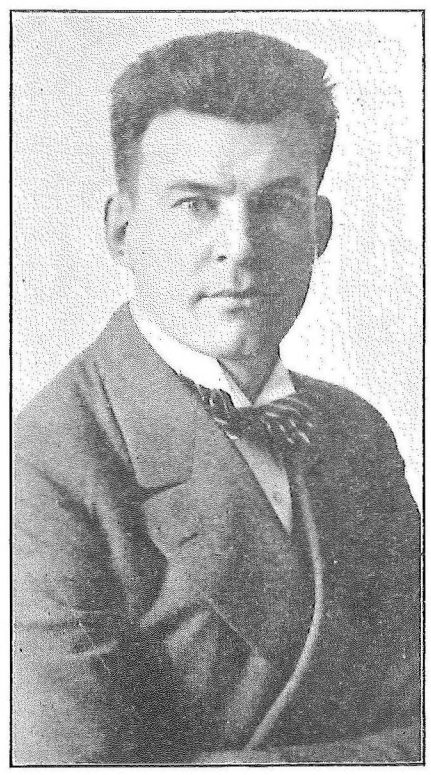
3. Posterior Innominate:

Patient face down. Pillow under thighs. Patient's elbows on table on a line dropped perpendicularly from shoulders, a downward springing pressure is made on inferior portion of posterior surface of sacrum.

Tissue does not always normalize with Osseous correction. If there is induration, infiltration or any pathological change which places too much

(Continued on page 4, column 4)

WHO'S WHO



C. HADDON SODEN, D. O.

Dr. Charles Haddon Soden, head of Department of Diagnosis and Technique, was born on January 25, 1891, in Mohill Canaught, Ireland. At the age of 14 he came to this country and was educated in our public schools. Later he was graduated from the Egberts High School, Cohees, N. Y., and then entered the State Teachers College, at Kirksville, Mo. For three years Dr. Soden attended the American School of Osteopathy, spending his fourth year at the Andrew T. Still School, from which he received the degree of D. O. in 1923. Since then he has been engaged in post-graduate work, doing considerable such work in 1925.

Since coming to our Philadelphia institution, Dr. Soden has taught and demonstrated technique and has carried on research work in spinal mechanics by means of palpation, cadaveric study and X-Ray.

He is a member of the Canadian Club, Masonic Order and Phi Sigma Gamma. His practice is carried on from his office at 818 Pennsylvania Building, Philadelph[illegible]

AROUND THE CAMPUS

—It's a funny world. The full professors often teach the driest subjects.

—"Bolting down" your food is the only way to enjoy a sea voyage.

—Otherwise you'll have to report that "everything came out fine."

—"Combination shot," murmured the lady cue artist as she leaned too far over the billiard table. (Prizes will be given to the first six readers who can see this one.)

—Laundries and good teachers bring things home to you that you never saw before.

—The DIGEST reporter has learned that Hoover positively does not wear "President" suspenders nor drink "White House" coffee.

—Some students think the roll of honor is a bun that won a prize in the baking contest.

—When the eye specialist sends his bill he becomes a skin specialist.

—We have now learned why Washington crossed the Delaware. It was to get away from Philadelphia.

—Wouldn't history be grand if Lady Godiva had had bobbed hair.

—The Dean, acting as game warden, has put an end to out-of-season shooting in 1818.

—A student's education is still in its infancy when it rests on a crib.

—Where to keep our rabbits in the new college will present a hair-raising problem.

—These people who ar as pure and white as snow often drift.

—A student strangled last week. He was eating meat across the way when someone hollered "Whoa" and the stuff stopped in his throat.

R. C. E.